

40. (Amended) A 2-oxetanone based paper size manufactured from fatty acids having a main chain containing 6-22 carbons free of unsaturated bonds, and at least 40% of the chains including a branching.

41. (Amended) A 2-oxetanone based paper size of claim 40 wherein 40 to 60% of said fatty acids have a branched main chain.

42. (Amended) A 2-oxetanone based paper size of claim 40 wherein said fatty acid with the branched main chain is isostearic acid.

REMARKS

Status of Claims:

Claims 1-42, as re-numbered by the Examiner, were pending in the application. Claims 27-39 are hereby cancelled without prejudice or disclaimer of the subject matter contained therein. Claims 1-26 and 40-42 are now pending in the application. Each of the pending claims defines an invention that is novel and unobvious over the cited art. Favorable consideration of this case is respectfully requested.

Rejections Under 35 U.S.C. § 112, 2nd Paragraph:

Claims 6, 18, and 32 were rejected under 35 U.S.C. § 112, 2nd Paragraph, as being indefinite as not indicating the basis of the numbers.

Claims 6 and 18 are hereby amended to recite percentage of fiber weight. Support for this amendment was present in the original disclosure at, for example, page 7, lines 16-18. Claim 32 is hereby cancelled.

Rejection Under 35 U.S.C. § 102(b):

Claims 1-42 were rejected under 35 U.S.C. § 102(b) as being anticipated by Brungardt (5,766,417).

Rejection under 35 U.S.C. § 102 requires the prior art disclose each and every limitation of the claimed invention (MPEP § 706.02). In determining anticipation, no claim limitation may be ignored. See *Pac-Tex, Inc. v. Amerace Corp.*, 14 USPQ2d 1871 (Fed. Cir. 1990). Anticipation requires the disclosure, in a prior art reference, of each and every recitation as set forth in the claims. See *Titanium Metals Corp. v. Banner*, 227 USPQ 773 (Fed. Cir 1985), *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 1 USPQ2d 1081 (Fed. Cir 1986), and *Akzo N.V. v. U.S. International Trade Commissioner*, 1 USPQ2d 1241 (Fed. Cir 1986). There must be no difference between the claimed invention and reference disclosure for an anticipation rejection under 35 U.S.C. § 102. See *Scripps Clinic and Research Foundation v. Genentech, Inc.*, 18 USPQ2d 1001 (CAFC 1991) and *Studiengesellschaft Kohle GmbH v. Dart Industries*, 220 USPQ 841 (CAFC 1984). The evidentiary record fails to teach each limitation of the present invention in view of the patentable distinction of the 2-oxetanones at issue.

Claims 1 and 13 have been amended to recite that the fatty acids of the present inventive oxetanones are essentially free unsaturated bonds so as to clarify a distinction between Brungardt and the present invention. The present invention relates to papermaking sizes based on 2-oxetanones. The art is familiar with 2-oxetanones, *per se*. However, the present invention requires the fatty acids comprising said oxetanones to be fully saturated. (See page 5, lines 9-11). In contradistinction, Brungardt requires at least 25% of the fatty acids be unsaturated. (Column 4, lines 29-30). An oxetanone required to contain at least 25% unsaturated fatty acids does not anticipate an oxetanone required to consist only of completely saturated fatty acids.

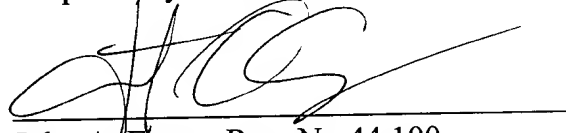
Conclusion:

It is respectfully requested that the foregoing amendment be entered, that the application as so amended receive an examination on the merits, and that the claims as now presented receive an early allowance.

In the event the Examiner believes an interview might serve to advance the prosecution of this application in any way, the undersigned attorney is available at the telephone number noted below.

The Commissioner is hereby authorized to charge any fees or credit any overpayment associated with this communication, including any extension fees or fees for the net addition of claims, to Deposit Account No. 22-0185.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'J. A. Evans', written over a horizontal line.

John A. Evans, Reg. No 44,100
Connolly, Bove, Lodge & Hutz LLP
1990 M Street, N.W.
Washington, D.C. 20036-3425
Telephone: 202-331-7111

Date: November 19, 2002

APPENDIX
MARK-UP TO SHOW CHANGES

1. (Amended) A method of manufacturing a paper of mono- and multi-colour ink-jet printable grade by de-watering a paper web from fiber pulp slurry, [the] said method containing a step of adding a 2-oxetanone based size to [the] said pulp slurry, [the size] said 2-oxetanone being manufactured from [greater number than one] a plurality of saturated fatty acids having a main chain comprising 6 to 22 carbons [linked to each other by saturated] essentially free of unsaturated bonds, [and of which acids at least one is an acid with branched chain] wherein at least one said fatty acid comprises a branched chain.
2. (Amended) The method of claim 1, wherein [the] said 2-oxetanone size is made from a mixture of [a] saturated linear-chain and [a] saturated branched-chain fatty acids.
3. (Amended) The method of claim 1, wherein [the] said 2-oxetanone size is made from a mixture of saturated fatty acids with the proportion of linear-chain and branched-chain fatty acids in the order of 1 to 1.
4. (Amended) The method of claim 1, wherein the 2-oxetanone size is made from a mixture of fatty acids wherein said at least one branched-chain fatty acid comprises at least 40% of said mixture. [with a fatty acid proportion of 40 % or higher of the at least one branched-chain fatty acid.]
5. (Amended) The method of claim 1, wherein [the] said at least one branched-chain fatty acid is isostearic acid.

13. (Amended) A method of manufacturing a paper of mono- and multi-colour ink-jet printable grade from fiber pulp slurry into a paper web, the method containing a step

of adding a size onto the paper web, wherein the size is a 2-oxetanone based size manufactured from [greater number than one of] a plurality of saturated fatty acids[, the acids] having a main chain comprising 6 to 22 carbons [linked to each other by saturated] essentially free of unsaturated bonds, and [of which acids at least one is an acid with branched chain] wherein at least one said fatty acid comprises a branched chain.

14. (Amended) The method of claim 13, wherein [the] said 2-oxetanone [size] is made from a mixture of a linear-chain and a branched-chain fatty acids.

19. (Amended) The method of claim 13, including further a stock sizing step where a 2-oxetanone based stock size is used which is manufactured from greater number than one of fatty acids, the acids having a main chain comprising 6 to 22 carbons linked to each other by saturated bonds, and of which acids at least one is an acid with a branched chain.

40. (Amended) A 2-oxetanone based paper size manufactured from fatty acids having a main chain containing 6-22 carbons [linked to each other by saturated] free of unsaturated bonds, and at least 40% of the chains including a branching.

41. (Amended) A 2-oxetanone based paper size of claim [44 where] 40 wherein 40 to 60% of [the] said fatty acids have a branched main chain.

42. (Amended) A 2-oxetanone based paper size of claim [44 where] 40 wherein said fatty acid with the branched main chain is isostearic acid.